

LACTOENOS 450 PreAc®

Enococcus oeni strain for a quick MLF start, combined with the exclusive production process: PreAc®.
Qualified for the elaboration of products for direct human consumption in the field of the regulated use in oenology. In accordance with the current EU regulation n° 2019/934.

SPECIFICATIONS AND OENOLOGICAL APPLICATIONS

- Strain with a high resistance to ethanol.
- One of the strains with the highest malolactic activity on the market in optimal conditions.
- Low production of diacetyl and ethyl lactate.
- Low volatile acidity (VA) production.
- No biogenic amine production.
- The blend of effectiveness and cost makes **LACTOENOS 450 PreAc®** the ideal preparation for the control and reliability of malolactic fermentation in white and red wines of any style.

TAV (% vol)	Up to 17
pH	From 3.3
Total SO ₂ (mg/L)	Up to 60
Temperature	From 16°C (60.8°F)

NB: These parameters have a cumulatively inhibiting effect.

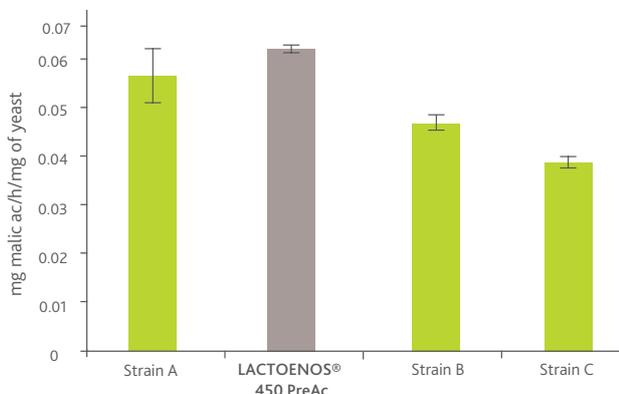
Survival and activity spectrum of the **LACTOENOS 450 PreAc®** bacteria:

LACTOENOS 450 PreAc® allows a rapid onset of MLF. Implementation is simple (in 30 minutes only for early co-inoculation and in 12 hours for late co-inoculation or post AF inoculation).

LACTOENOS 450 PreAc® is aromatically neutral and permits to preserve the fruity character of the wine.

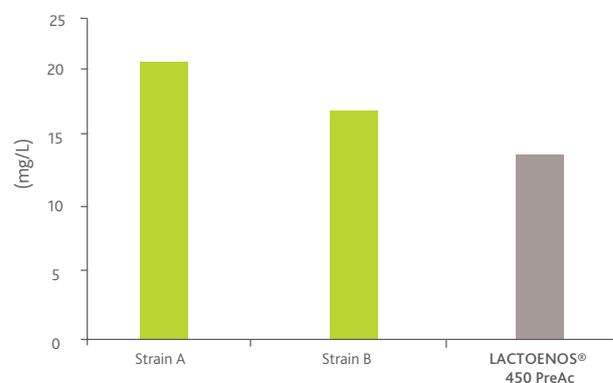
EXPERIMENTAL RESULTS

- Malolactic activity on entire cells



Malolactic activity: quantity of malate degraded per time unit (h) and per quantity of cells (mg of yeast), in buffer medium at 25°C / 77°F.

- Production of diacetyl (mg/L)



Diacetyl production by 3 strains. Sample after MLF.
* Merlot wine, 2005.



LAFFORT
L'œnologie par nature

PHYSICAL CHARACTERISTICS

Aspect Powder

Colour Clear beige

CHEMICAL AND MICROBIOLOGICAL ANALYSIS

Humidity (%) < 8

Bacteria counted on each Petri dish (CFU/g) > 10¹¹

Mould (CFU/g) < 10³

Yeast (CFU/g) < 10³

Acetic bacteria (CFU/g) < 10⁴

Salmonella (/25g) None

Staphylococcus (/g) None

Coliforms (CFU/g) < 10²

E. coli (/g) None

Lead (ppm) < 2

Mercury (ppm) < 1

Arsenic (ppm) < 3

Cadmium (ppm) < 1

PROTOCOL FOR USE

- Inoculate as soon as possible. There are several inoculation methods:
 - **Early co-inoculation** (bacteria inoculation 24 – 48h after the alcoholic fermentation start), technique more and developed that we advise for its many advantages like the optimisation of bacteria efficiency.
 - **Late co-inoculation** (inoculation at 1020 – 1010 density).
 - **Sequential inoculation.**
- Do not use opened bags.
- Use a container inert and clean. Mix 1 L of mineral water and 1 L of wine at 20°C /68°F for 50 hL dose. Dilute **ENERGIZER®**, and then add the **LACTOENOS 450 PreAc®** dose. Homogenise and let it rest for 30 minutes in early co-inoculation, 12h at 20°C /68°F in late co-inoculation or sequential inoculation. Add to the tank.
- Maintain the tank temperature throughout the MLF (at about 20°C /68°F).
- In hard conditions (sluggish AF, poor medium or high alcoholic degree) and for a quicker MLF kinetic, add 20 -40 g/hL of **MALOBOOST®**.
- Respect the volume of wine indicated on the bacteria dose (50 hL).
- **LACTOENOS® 450 PreAc** can be used in organic winemaking without the use of **ENERGIZER®**.

STORAGE RECOMMENDATION

- On reception, keep refrigerated (-18°C /-0.4°F or +4°C/32°F) in its unopened original packaging.
- Optimal date of use: 30 months at -18°C /-0.4°F.
18 months at +4°C/32°F.
- Do not use opened packaging.
- Unopened sachets of oenological bacteria can be transported and stored for 7 days at ambient temperature (< 25°C/77°F) without any significant loss of activity or efficacy.

PACKAGING

- Dose for 50 hL and 250 hL (**ENERGIZER®** supplied).

